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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/517,365	12/10/2004	Kenichiro Kodama	Q84976	5580
23373 7	7590 07/07/2005 ·	•	EXAM	INER
SUGHRUE MION, PLLC			LY, NGHI H	
2100 PENNSYLVANIA AVENUE, N.W. SUITE 800			ART UNIT	PAPER NUMBER
WASHINGTO	N, DC 20037		2686	
			DATE MAILED: 07/07/2004	•

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
	10/517,365	KODAMA ET AL.			
Office Action Summary	Examiner	Art Unit			
	Nghi H. Ly	2686			
The MAILING DATE of this communication a Period for Reply	ppears on the cover sheet wi	th the correspondence address			
A SHORTENED STATUTORY PERIOD FOR REF THE MAILING DATE OF THIS COMMUNICATION  - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a re - If NO period for reply is specified above, the maximum statutory perion  - Failure to reply within the set or extended period for reply will, by state Any reply received by the Office later than three months after the mail earned patent term adjustment. See 37 CFR 1.704(b).	I. 1.136(a). In no event, however, may a resploywithin the statutory minimum of thirt and will apply and will expire SIX (6) MON ute, cause the application to become AB	eply be timely filed y (30) days will be considered timely. THS from the mailing date of this communication. ANDONED (35 U.S.C. § 133).			
Status					
1)⊠ Responsive to communication(s) filed on 10	December 2004.				
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ The	nis action is non-final.				
3) Since this application is in condition for allow	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is				
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims					
4) ⊠ Claim(s) <u>1-6</u> is/are pending in the application 4a) Of the above claim(s) is/are withdrest 5) □ Claim(s) is/are allowed.  6) ⊠ Claim(s) <u>1-6</u> is/are rejected.  7) □ Claim(s) is/are objected to.  8) □ Claim(s) are subject to restriction and	rawn from consideration.				
Application Papers		•			
9) The specification is objected to by the Exami	ner.	,			
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.					
Applicant may not request that any objection to the	· · · · · · · · · · · · · · · · · · ·				
Replacement drawing sheet(s) including the corre					
11) The oath or declaration is objected to by the	Examiner. Note the attached	Office Action or form PTO-152.			
Priority under 35 U.S.C. § 119	i i i i i i i i i i i i i i i i i i i	•			
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority docume 2. Certified copies of the priority docume 3. Copies of the certified copies of the priority docume application from the International Bure * See the attached detailed Office action for a list	nts have been received.  nts have been received in A  iority documents have been eau (PCT Rule 17.2(a)).	pplication No received in this National Stage			
Attachment(s)					
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)					
<ul> <li>2) Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/0 Paper No(s)/Mail Date 12/10/04.</li> </ul>	Paper No(s	)/Mail Date formal Patent Application (PTO-152)			

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## **DETAILED ACTION**

#### Information Disclosure Statement

1. The information disclosure statement filed 12/10/2004 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

# Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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4. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Woo (US 6,681,125) in view of Aoto (US 6,615,055).

Regarding claim 1, Woo teaches a folding type portable radio communication terminal (see fig.2) comprising: a first chassis provided with a display part at its front surface side (see fig.2, item 12), a second chassis provided with an operation part at its front surface side (fig.2, item 13), a coupling part for openably/closably coupling end parts of the first and the second chassis so that the front surface sides the second chassis and the first chassis face each other (see fig.2, item 15), and a whip antenna for data transmission/reception provided in the coupling part side end part of the second chassis to be capable of being pulled out (see fig.2, antenna 20, see column 3, lines 45-58 and see column 4, lines 49-64), characterized in that in a state where the first and the second chassis are opened (see fig.2, two chassis are opened), the whip antenna is pulled out in a direction of approaching the first chassis and is held (see fig.2, the antenna 20 is pulled out in a direction of approaching the first chassis).

Woo does not specifically disclose the antenna is pulled out in a direction of approaching <u>a back surface side</u> of the first chassis and is held.

Aoto teaches the antenna is pulled out in a direction of approaching <u>a back</u> <u>surface side</u> of the first chassis and is held (see Abstract, column 1, line 65 to column 2, line 39, see "*pulled out with <u>an inclination</u>*", also see fig.2, antenna 1 with an inclination. Since Aoto's antenna can be pulled in any direction with respect to an inclination, the teaching of Aoto inherently teaches applicant's claimed limitation).

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Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Aoto into the system of Woo so that the antenna can be adjusted for better radio signal.

Regarding claim 2, Woo teaches the whip antenna is formed into a curved shape in advance (see 3, lines 45-58, since Woo teaches whip antenna, the teaching of Woo inherently teaches the antenna can be formed into a curved shape in advance as claimed). Woo does not specifically disclose that the antenna approaches the back surface side of the first chassis pulled-out state.

Aoto teaches that the antenna approaches the back surface side of the first chassis pulled-out state (see Abstract, column 1, line 65 to column 2, line 39, see "pulled out with <u>an inclination</u>", also see fig.2, antenna 1 with an inclination. Since Aoto's antenna can be pulled in any direction with respect to an inclination, the teaching of Aoto inherently teaches applicant's claimed limitation).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Aoto into the system of Woo so that the antenna can be adjusted for better radio signal.

Regarding claim 3, Woo teaches a folding type portable radio communication terminal and whip antenna according to claim 1. Woo does not specifically disclose a tip of the antenna comes in contact with the back surface of the first chassis in the middle of an open operation of the first and the second chassis, and when the open operation is further performed, whip antenna extended while the tip slides on the back surface the first chassis.

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Aoto teaches a tip of the antenna comes in contact with the back surface of the first chassis in the middle of an open operation of the first and the second chassis, and when the open operation is further performed, antenna extended while the tip slides on the back surface the first chassis (see Abstract, column 1, line 65 to column 2, line 39, see "pulled out with an inclination", also see fig.2, antenna 1 with an inclination. Since Aoto's antenna can be pulled in any direction with respect to an inclination, the teaching of Aoto inherently teaches applicant's claimed limitation).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Aoto into the system of Woo so that the antenna can be adjusted for better radio signal.

Regarding claim 4, Woo further teaches the folding type portable radio communication is constructed in such a way that in a state where the first chassis and the second chassis are closed (see fig.2, cover 10a can be closed into main body 10b), the coupling part (see fig.2, item 15) side end part of the second chassis protrudes more than the coupling part side end part of the first chassis (see fig.2), and the whip antenna is provided to be capable of being pulled from a protruding portion of the second chassis (see fig.2, the whip antenna is provided to be capable of being pulled from a protruding portion of the second chassis (see fig.2).

Regarding claim 5, Woo further teaches the whip antenna constructed be positioned substantially at a center the coupling part side end part of the second chassis (see fig.2).

Regarding claim 6, Woo teaches a folding type portable radio communication terminal and whip antenna according to claim 1. Woo does not specifically disclose the antenna is pulled out in a direction inclined by a specified angle from a vertical direction with respect to an end surface of the second chassis and is held.

Aoto teaches the antenna is pulled out in a direction inclined by a specified angle from a vertical direction with respect to an end surface of the second chassis and is held (see Abstract, column 1, line 65 to column 2, line 39, see "pulled out with an inclination", also see fig.2, antenna 1 with an inclination. Since Aoto's antenna can be pulled in any direction with respect to an inclination, the teaching of Aoto inherently teaches applicant's claimed limitation).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Aoto into the system of Woo so that the antenna can be adjusted for better radio signal.

### Conclusion

- 5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
  - a. Ono (US 6,782,273) teaches portable wireless apparatus.
  - b. Kim (US 6,897,825) teaches antenna apparatus for folder type mobile phone.
  - c. Holshouser (US 6,249,688) teaches antenna electrical coupling configurations.

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6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nghi H. Ly whose telephone number is (571) 272-7911. The examiner can normally be reached on 8:30 am-5:30 pm Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on (571) 272-7905. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nghi H. Ly

Marsha D Bank Harold

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